

There is no doubt of the appeal of the caruncle to the ants; it attracts them no less than nectar attracts bees. Quoting William Morton Wheeler (Ants . . . 1910. p. 315), "Surnander (1903) and other botanists believe that ants eat the caruncles." The present study seems to confirm that hypothesis, especially so, since there had been no rain between the first ripening of the capsules and the final observations.

Bloodroot seeds, *Sanguinaria canadensis* L., have caruncles. These observations on Trillium seeds are paralleled by those of Dr. E. B. Southwick as told by Dr. Wheeler (ibid). Dr. Southwick observed ants carrying off bloodroot seeds and feeding on the caruncles. In the writer's garden this may account for the recent appearance of a bloodroot seedling, some twenty feet upgrate from the nearest group of bloodroot plants.

These two New England natives, *Trillium grandiflorum* and *Sanguinaria canadensis*, lack mechanical means of seed-dispersal. Each have ample caruncles, seemingly of food value to ants, which, serving as lures, suggests that seed-dispersal is accomplished through the agency of ants. Seeds discarded in the debris of ant nests should find a favorable medium for germination.

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CYPERUS MICROIRIA ON LONG ISLAND.—A specimen collected at Hempstead, Long Island, by E. P. Bicknell in 1906 and first recorded in the 2nd edition of Britton & Brown's Illustrated Flora I, 301 (1913) as *Cyperus Iria* L., was referred to *C. amuricus* Maxim. by Prof. Fernald and Mr. Griscom in RHODORA XXXVII, 148 (1935). There are, however, two closely allied species in Eastern Asia which are distinguished from *C. Iria* in having distinctly mucronate scales, i. e. *C. amuricus* Maxim. and *C. microiria* Steud. The difference between the two plants was clearly pointed out in Bot. Mag. Tokyo XLVII, 236-239 (1933) by Prof. Nakai who carefully examined authentic specimens of related species during his trip in Europe. A specimen from Long Island well agrees with Japanese specimens of *C. microiria* and is not the true *C. amuricus* of which I have also examined the isotype specimen in the Gray Herbarium. *C. microiria* differs from *C. amuricus* by having shortly mucronate scales which are generally more yellowish and more compound inflorescences, and is an inter-

mediate species between *C. amuricus* and *C. Iria*. It is a native of Japan proper, Korea, Manchuria and China, and *C. Iria* var. *acutiglumis* Fiori from Italy is also identical with that species. According to Prof. Nakai, *C. amuricus* var. *japonicus* Miquel is a form of the true *C. amuricus* with shorter spikelets. The synonymy of *C. microiria* is summarized as follows:

CYPERUS MICROIRIA Steudel, Syn. Pl. Glum. II, 23 (1855). Syn. *Cyperus Textori* Miquel in Ann. Mus. Bot. Lugd.-Bat. II. 141 (1865). *C. Iria* §. *microiria* (Steudel) Franch. et Sav., Enum. Pl. Jap. II. 103 (1876). *C. Iria* var. Hance ex C. B. Clarke in Journ. Linn. Soc. XXI, 138 (1884). *C. japonicus* Makino in Bot. Mag. Tokyo XVIII, 53 (1904) excl. syn. Miq.; non *C. japonicus* Miq. 1865. *Chlorocyperus Franchetii* Palla in Österr. Bot. Zeitschr. LIX, 193, t. 3, f. 6 (1909). *Cyperus Iria* var. *acutiglumis* Fiori, Fl. Ital. Exsicc. ser. 2, no. 1231 (1910). *C. Iria* var. *microiria* (Steudel) E. G. Camus in Fl. Gén. Indo-Chin. VII, 59 (1912) quoad syn. *C. amuricus* var. *subirioides* Kükenthal in Fedde, Rep. XXVII, 107 (1929). *C. Iria* var. *microiria* (Steudel) Koidzumi, Fl. Symb. Or.-Asia. 37 (1930). *C. amuricus* var. *Textori* (Miq.) Kükenthal in Sinensia III, 80 (1932). *C. amuricus* var. *japonicus* (non Miquel) sensu Kükenthal in Engler, Pfl.-reich IV²⁰, Lief. 1, 153 (1935) excl. syn. nonnull.—HIROSHI HARA, Gray Herbarium.

ASTER KUMLIENI: A CORRECTION.—Apparently the first use of the name *Aster Kumlieni* in print is by Gray in 1886 in Synoptical Flora I²: 179, where, under the citation "*A. Kumleini*, Fries, in distrib. Mus. Ups. no. 5," it appears as a synonym of *A. oblongifolius* Nutt., var. *rigidulus* A. Gray. The same treatment is accorded *Aster Kumlieni* by Nelson in New Manual of Rocky Mountain Botany, and by Robinson and Fernald in the 7th ed. of Gray's Manual. The name itself appears not to have been validly published until 1906, in Rydberg's Flora of Colorado. Rydberg also treated it as a good species in his later Flora of the Rocky Mountains and Flora of the Prairies and Plains, separating it from *A. oblongifolius* as a lower, more western plant, with more rigid, slightly broader and rougher leaves, and a distinctly fastigate habit. In Britton & Brown's Illustrated Flora it is treated as a synonym of *A. oblongifolius*. It is noteworthy that, in all these works, the uniform spelling *A. Kumleini* appears.

Mr. Ray M. Koon, Head of the Cedar Hill Field Station of Massachusetts State College, Waltham, Mass., has prepared for the new edition of *Standardized Plant Names* what is perhaps the first complete checklist of *Aster* species thus far compiled. In writing Mr. Koon,